

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CMC MATERIALS, INC.,)	
)	
Plaintiff,)	
)	
v.)	
)	
DUPONT DE NEMOURS, INC., ROHM AND)	C.A. No. 20-738-GBW
HAAS ELECTRONICS MATERIALS CMP, LLC,)	
ROHM AND HAAS ELECTRONIC MATERIALS)	
CMP ASIA INC. (d/b/a ROHM AND HAAS)	
ELECTRONIC MATERIALS CMP ASIA INC.,)	
TAIWAN BRANCH (U.S.A.)), ROHM AND HAAS)	
ELECTRONIC MATERIALS ASIA PACIFIC CO.)	
LTD., ROHM AND HAAS ELECTRONIC)	
MATERIALS K.K., <i>and</i> ROHM AND HAAS)	
ELECTRONIC MATERIALS LLC)	
)	
Defendants.)	

**REQUEST FOR INTERNATIONAL JUDICIAL ASSISTANCE
(LETTER ROGATORY)**

The United States District Court for the District of Delaware presents its compliments to the Appropriate Judicial Authority of Japan, and requests international judicial assistance to obtain evidence to be used in the above-captioned civil action before the United States District Court of the District of Delaware. This Court has authority to submit this Letter Rogatory under 28 U.S.C. §§ 1651 and 1781(b)(2).

This Court requests the international judicial assistance, which is necessary in the interests of justice. Specifically, this Court requests the assistance of the Appropriate Judicial Authority of Japan, by the proper and usual process of Japan's courts, to compel the below-named third-party to produce the documents requested in **Attachment A** and to be examined under oath through the person(s) most knowledgeable about the topics in **Attachment B**:

Fuso Chemical Co., Ltd.
Nissei Fushimi-machi Bldg.
Shinkan, 3-10, Koraibashi 4-chome,
Chuo-ku, Osaka 541-0043
+81-6-6203-4771

Based on representations made by Plaintiff CMC Materials Inc. (“CMC”), this Court believes that justice cannot be served between the parties in the above-captioned civil action unless the evidence requested herein is made available by the Appropriate Judicial Authority of Japan, particularly with respect to the validity of CMC’s U.S. Patent No. 9,499,721. CMC asserts that Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP, LLC, Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)), Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., Rohm and Haas Electronic Materials K.K., and Rohm and Haas Electronic Materials LLC (collectively, “DuPont”) commit acts of patent infringement by making, using, selling, offering to sell, and/or importing chemical-mechanical planarization slurries that comprise “colloidal silica abrasive particles,” including those alleged to be made by the Fuso Chemical Co., Ltd. **Attachment C** (Complaint) at ¶¶ 16-21, 26-28. This court believes that Fuso Chemical Co., Ltd., as a manufacturer of identified colloidal silica particles, is in possession of unique documents and things and has unique knowledge regarding material facts that are relevant for the proper prosecution of the above-referenced civil action, and that cannot be obtained without the assistance of the Appropriate Judicial Authority of Japan.

I. FACTS

This judicial proceeding is a civil action initiated by the plaintiff:

CMC Materials Inc.
870 N. Commons Drive
Aurora, IL 60504 U.S.A.

The defendants are:

DuPont de Nemours, Inc.
974 Center Road, Building 730
Wilmington, DE 19805-1269 U.S.A.

Rohm and Haas Electronic Materials CMP, LLC
451 Bellevue Road
Newark, DE 19713-3431 U.S.A.

Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.))
4F., NO.6, LN. 280, Zhongshan N. Rd.
Dayuan Dist., Taoyuan City 337017 Taiwan

Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd.
6, Kesi 2nd Rd.
Chunan, Miaoli 350401 Taiwan

Rohm and Haas Electronic Materials K.K.
Sanno Park Tower, 2-11-1
Nagata-cho, Chiyoda-ku,
Tokyo 100-0014 Japan

Rohm and Haas Electronic Materials LLC
455 Forest Street
Marlborough, MA 01752-3001 U.S.A.

This civil action is governed by the laws of the United States, 35 United States Code §§ 1 et seq., based on a Complaint filed by CMC on June 1, 2020 (**Attachment C**). CMC's Complaint alleges infringement of U.S. Patent No. 9,499,721 by DuPont. CMC seeks an injunction barring the making, using, selling, and/or offering for sale within the United States and/or importing into the United States of Accused Products as well as monetary damages and any available equitable relief. **Attachment C** at ¶¶ 16-21 and "Prayer for Relief." The Accused Products are characterized generally as chemical mechanical planarization compositions formulated with colloidal silica abrasive particles, such as Fuso's colloidal silica particles (*id.* at ¶¶ 26-28), and

infringement of at least claim 1 depends in-part on characteristics of the colloidal silica particles (*id.* at ¶ 26).

This civil action was stayed on July 6, 2020, in view of a parallel proceeding before the United States International Trade Commission (“ITC”). Because the proceeding before the ITC has been terminated and is now final, the stay in this civil action was lifted on May 18, 2022, and the discovery process commenced.

DuPont seeks foreign discovery from Fuso because it is the manufacturer of colloidal silica particles for use in chemical-mechanical planarization slurries. CMC alleges that Fuso’s colloidal silica particles have been imported into the United States and used in products, which are alleged to infringe their U.S. Patent No. 9,499,721. Fuso was also the source of colloidal silica abrasive particles described in the Examples of CMC’s U.S. Patent No. 9,499,721. DuPont believes Fuso possesses unique documents and information concerning the colloidal silica abrasive particles relating to, *inter alia*, the first sale or offer for sale, first public use, first disclosure, inventorship, and numerous other issues relating to at least the validity of U.S. Patent No. 9,499,721.

II. DISCOVERY REQUESTED

It is respectfully requested that the Appropriate Judicial Authority of Japan compel Fuso to produce copies of documents, as described in **Attachment A**. It is additionally requested that the Appropriate Judicial Authority of Japan compel Fuso to make available for examination under oath the person(s) most knowledgeable to provide testimony regarding deposition topics set forth in **Attachment B**. The requested documents and deposition testimony will provide important evidence related to U.S. Patent No. 9,499,721. The Complaint is **Attachment C** to this Letter Rogatory.

This Court understands the confidential nature of the documents and testimony requested from Fuso. Under Rule 26.2 of this Court, until there is a protective order in place, disclosure of confidential information of Fuso would be limited to trial counsel, who are obligated to maintain confidentiality. Any future protective order in this civil action would also protect the confidentiality of any documents that Fuso produces and testimony that Fuso provides.

Certified Japanese translations of **Attachments A, B, and C** are provided.

III. SPECIAL METHODS AND PROCEDURES REQUESTED TO BE FOLLOWED

To the extent permitted by the applicable laws of Japan, this Court respectfully requests that the Appropriate Judicial Authority of Japan require that the following methods and procedures be followed in connection with the deposition and document production requested herein.

With regard to the production of documents identified in **Attachment A**, in the event any document called for by these documents is withheld in whole or in part on the basis of any applicable privilege under Japanese law, it is requested that Fuso furnish a privilege log that identifies each document for which any privilege is claimed and that provides, with respect to each document, the following information:

1. The date the document was created and last modified;
2. The subject matter of the document;
3. The person(s) who prepared the document;
4. All persons to whom the document was distributed, shown, or explained;
5. The document's present custodian; and
6. The nature of the privilege asserted.

Additionally, it is respectfully requested that each document described in **Attachment A** be produced or provided for inspection and copying in its entirety, without abbreviation or

redaction, as maintained in the ordinary course of business, at least ten (10) days before the examination.

With regard to the deposition, it is respectfully requested that an examiner or other appropriate judicial officer of Japan, or consular officer at the United States embassy and/or consulate in Japan direct that the witness be duly sworn in accordance with the applicable procedures of Japan, and that the testimony be taken and transcribed by a qualified court reporter and videographer chosen by DuPont's representatives.

To the extent permitted by the applicable laws of Japan, this Court respectfully requests that the Appropriate Judicial Authority of Japan require that the following methods and procedures be followed in connection with the examination and document production requested herein:

1. Fuso be required to designate one or more knowledgeable officers, directors, managing agents, employees, or other person(s) to testify on behalf of Fuso;
2. Fuso be required to identify the person or persons who will testify pursuant to this Request and the matter or matters about which each person will testify;
3. The examination be conducted orally;
4. The parties' legal representative or their designees (such as their attorneys), interpreters, and an Official Court Reporter and Videographer be permitted to be present during the examination;
5. There be excluded from the examination all persons other than those individuals permitted under bullet 4 and any official of the court of Japan or staff of the United States embassy and/or consulate required to be present during such proceedings;

6. The Official Court Reporter and Videographer be permitted to record verbatim the examination;
7. The Official Court Reporter and Videographer be permitted to record the examinations by audiovisual means;
8. The attorneys from the law firm of Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, acting as legal representatives of DuPont, or their designees, be permitted to conduct the examination;
9. The person conducting the examination be permitted to ask questions regarding the topics in **Attachment B**;
10. Ten and a half (10.5) hours be allotted for the examination of each witness who requires a translator, and seven (7) hours be allotted for the examination of each English-speaking witness;
11. The witnesses be examined as soon as practicable; and
12. The documents be provided by Fuso no later than ten business days before the deposition at a convenient location to be determined.

Finally, it is requested that the individual identified below be furnished as soon as practically possible with a copy of the executed Letter Rogatory and be informed as soon as practicable of the time and place for examination of the witness(es).

Mareesa A. Frederick
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.
901 New York Avenue, N.W.
Washington, D.C. 20001
Telephone: (202) 408-4000
Facsimile: (202) 408-4400

III. RECIPROCITY

The United States District Court for the District of Delaware is willing to provide similar assistance to judicial tribunals of Japan.

IV. REIMBURSEMENT FOR COSTS

To the extent that there are expenses associated with providing assistance in response to this Letter Rogatory, the fees and costs incurred will be borne by Defendants. Requests for reimbursement may be submitted to Defendants' counsel via email to: DuPont-Delaware@finnegan.com or via U.S. mail to:

Mareesa A. Frederick
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.
901 New York Avenue, N.W.
Washington, D.C. 20001
Telephone: (202) 408-4000
Facsimile: (202) 408-4400

Date of Request:	Signature and Seal of Requesting Authority:
 ____ of _____, 2022	 _____ The Honorable Gregory B. Williams United States District Judge United States District Court for the Delaware Wilmington, DE, United States of America

Attachment A

Documents and Things to be Produced by Fuso Chemical Co., Ltd

INSTRUCTIONS

1. For each request for production, produce any and all documents within the scope of the request that are in your possession, custody, or control.
2. If any responsive document is in a language other than English and an English translation exists, provide both documents and translation.
3. All documents that respond, in whole or in part, to any portion of any request shall be produced in their entirety, including all attachments and enclosures.
4. Electronic records and computerized information must be produced in their native electronic format, together with a description of the system from which they were derived sufficient to permit rendering the records and information intelligible.
5. If your response to a particular request for production is a statement saying that you lack the ability to comply with that request, specify whether the inability to comply is because the particular item or category of information never existed, has been destroyed, has been lost, misplaced, or stolen, or has never been, or is no longer, in your possession, custody, or control, in which case the name and address of any person or entity known or believed by you to have possession, custody, or control of that information or category of information must be identified.
6. In the event that any document called for by these requests has been destroyed or discarded, that document is to be identified by stating: (i) the author(s), addressee(s) and any indicated blind copyee(s); (ii) the document's date, number of pages, and attachments or appendices; (iii) the document's subject matter; (iv) the date of destruction or discard, and reason for destruction or discard; (v) the persons who were authorized to carry out such destruction or

discard; and (vi) whether any copies of the documents presently exist and, if so, the name of each custodian or each copy.

7. If no documents exist that are responsive to a particular request, that fact should be stated in your responses to such a request.

8. Mark each page which you consider to contain confidential business information with the designation “CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER”. If a page is not marked with such designation, it is assumed that it does not contain confidential business information.

9. Please identify the individual or individuals you intend to proffer to testify on your behalf at least ten (10) days prior to the date of the first day of deposition taken pursuant to this subpoena, and identify the topics upon which each deponent will be prepared to testify.

DEFINITIONS

1. “Fuso,” “You,” and “Your” means Fuso Chemical Co., Ltd., any employee, member, agent, representative, consultant, accountant, attorney, or any other person under the control of Fuso Chemical Co., Ltd., its predecessors-in-interest, parent corporations, divisions, subsidiaries, affiliates, joint ventures or any other legal entities that are wholly or partially owned or controlled by Fuso, either directly or indirectly, as well as the principals, directors, officers, owners, employees, members, agents, representatives, consultants, accountants, and attorneys of these entities.

2. The term “CMC” means CMC Materials, Inc., any employee, member, agent, representative, consultant, accountant, attorney, or any other person under the control of CMC Materials, Inc., its predecessors-in-interest, parent corporations, divisions, subsidiaries, affiliates, joint ventures or any other legal entities that are wholly or partially owned or controlled by CMC

Materials, Inc., including Cabot Microelectronics Corporation, either directly or indirectly, as well as the principals, directors, officers, owners, employees, members, agents, representatives, consultants, accountants, and attorneys of these entities.

3. The term “DuPont” means, solely for purposes of these Requests, DuPont de Nemours Inc. and Rohm and Haas Electronic Materials CMP, LLC, any employee, member, agent, representative, consultant, accountant, attorney, or any other person under the control of DuPont de Nemours Inc. or Rohm and Haas Electronic Materials CMP, LLC, their predecessors-in-interest, including Dow Chemical Company and Rohm and Haas Electronic Materials CMP, Inc., as well as their parent corporations, divisions, subsidiaries, affiliates, joint ventures or any other legal entities that are wholly or partially owned or controlled by DuPont de Nemours Inc. or Rohm and Haas Electronic Materials CMP, LLC.

4. “Person” means any natural person or entity, including corporations, proprietorships, partnerships, associations, joint ventures, businesses, trusts, organizations, governmental agencies, and other entities, and any combination thereof, and all predecessors in interest, successors, affiliates, subsidiaries, and related entities.

5. “Asserted Patent” means U.S. Patent No. 9,499,721.

6. “Colloidal Silica Abrasive Particles” means, solely for the purposes of these Requests and Topics, silica particles that are prepared using any sol-gel process.

7. “BS”, “HL”, and “PL” each refer to Fuso colloidal silica abrasive particle series designations, including all specific grades therein, e.g. BS-3 and PL-3C.

8. “PL-xxC” refers to any PL-series colloidal silica abrasive particle treated with aminopropyl trialkoxysilane, e.g. PL-3C.

9. “Zeta Potential” in the context of a particle means, solely for the purposes of these

Requests, the electrical potential difference between the electrical charge of the ions surrounding the particle and the electrical charge of the bulk solution containing the particle, such as used in Japanese published patent application JP2016-8157A.

10. The term “document(s)” includes all non-identical copies of a document, all drafts of final documents, all printed, recorded, or graphically portrayed matter in any form or embodiment, whether stored electronically or optically, or reproduced by any process, or written or produced by hand, or recorded in any other way, and all other data compilations from which information can be obtained and translated if necessary, that are or have been in Fuso’s actual or constructive custody or control, regardless of the medium on which they are produced, reproduced, or stored (including computer programs and files containing any requested information), and any recording or writing. For avoidance of doubt, the term “document(s)” includes any communications, whether written or electronic, other inquiries, correspondence, consultations, negotiations, agreements, understandings, letters, notes, telegrams, advertisements, computer mail, email, and all other documents evidencing any verbal or nonverbal interaction between persons and entities. Any document bearing marks, including initials, stamped initials, comments, or notations not part of the original text or photographic reproduction thereof, is a separate document.

11. The terms “each,” “any,” and “all” mean both any and all, and both each and every.

12. The terms “and” or “or” shall both be read in the conjunctive and in the disjunctive wherever they appear, and neither of these words shall be interpreted to limit the scope of a document request. The use of a verb in any tense shall be construed as the use of the verb in all other tenses, and the singular form shall be deemed to include the plural and vice-versa. All pronouns shall be construed to refer to the masculine, feminine, or neuter gender, in singular or plural, to make the request most inclusive.

13. When a document or thing “concerning” any matter is requested, the request encompasses, in whole or in part, any document or thing, as the case may be, constituting, containing, embodying, reflecting, describing, analyzing, identifying, mentioning, stating, evidencing, discussing, referring to, relating to, dealing with, prepared in connection with, or in any way pertaining to the requested matter.

14. The term “describe,” when used in relation to an act, event, instance, occasion, transaction, conversation, or communication, shall mean: (1) to state the date and place thereof; (2) to identify the individual participants; (3) to summarize separately for each individual participant what s/he said or did; and (4) to identify each document used or prepared in connection therewith or making any reference thereto.

15. “Identify” in the case of documents or things shall mean to state, to the extent known, the (1) type of document or thing (e.g., letter, telephone call, etc.), (2) its general subject matter, (3) its date of creation, (4) the author(s), addressee(s), recipient(s), and all persons who received or saw the document or thing, and (5) the place where the document or thing may be inspected, or if a copy of the document or thing has been previously supplied to Fuso or produced to Fuso, to so state and to specifically and individually identify the previously-supplied Bates number or production number.

16. “Identify” in the case of a product shall mean to state, to the extent known, the (1) product’s name, (2) all trade names, (3) all internal names, including but not limited to names used during development, (4) all product numbers, part numbers, and SKU numbers, (5) all trademarks, and (6) all documents sufficient for interpreting such names, numbers, and marks.

17. The term “date” means the exact day, month, and year, if ascertainable, or if not, Your best approximation thereof.

DOCUMENTS AND THINGS TO BE PRODUCED

1. For each of the colloidal silica particle disclosed, provided, sampled, sold, and/or offered for sale before June 25, 2015, by You to CMC or DuPont, including but not limited to particles with product designations HL-2, HL-3, PL-2L, PL-xxC, BS-1H, BS-2H, and BS-3, documents and things sufficient to show:

- a. all sales, offers to sell, importations into the United States, promotion, and sampling of such particles, including communications related to the same, and the manufacturing batch or lot numbers of such particles;
- b. each process, method, technique, and manufacturing processes used to make such particles, including the catalysts (e.g., ammonium, ammonia, ethyloxypropylamine, tetramethyl ammonium hydroxide, and ethylenediamine) used therein; and
- c. product specifications and any measurements or estimations of chemical mechanical planarization (“CMP”) properties or performance, pH, particle size, zeta potential, internal nitrogen content, or internal phosphorous content of such particles or formulations thereof.

2. For any entity other than CMC or DuPont to whom any “PL” grade, “HL” grade, or “BS” grade colloidal silica abrasive particles were disclosed, provided, sampled, sold, and/or offered for sale by You before June 25, 2015, documents and things sufficient to show:

- a. all sales, offers to sell, importations into the United States, promotion, and sampling of such particles, as well as communications related to the same;
- b. each process, method, technique, and manufacturing processes used to make such particles, including the catalysts (e.g., ammonium, ammonia, ethyloxypropylamine, tetramethyl ammonium hydroxide, and ethylenediamine) used therein; and

- c. product specifications and any measurements or estimations of CMP properties or performance, pH, particle size, zeta potential, internal nitrogen content, or internal phosphorous content of such particles or formulations thereof.
3. Documents and things sufficient to show Your relationship, agreements, and communications with CMC with respect to:
 - a. supplying or developing colloidal silica abrasive particles, including formulations thereof, before June 25, 2015, including all communications with CMC, all contracts or agreements with CMC, all invoices or other charges to or from CMC, and all payments received from or made to CMC; and
 - b. exclusivity over the production or supply of any colloidal silica abrasive particle, including colloidal silica abrasive particles with the product designations HL-3, BS-2, BS-2H or BS-3, as well as all documents relating to restrictions on any CMC competitor, including but not limited to DuPont, from acquiring such particles.
4. Documents and things sufficient to show all evaluation, estimations, or testing of colloidal silica abrasive particles to detect residual catalyst compounds in colloidal silica abrasive particles made using one or more of the following catalysts: ammonium, ammonia, ethyloxypyrrolamine, tetramethyl ammonium hydroxide, and ethylenediamine.
5. Documents and things sufficient to show and describe all sales before June 25, 2015 to a customer of colloidal silica abrasive particles with the product designations HL-2, HL-3, PL-2L, PL-xxC, BS-1H, BS-2H, BS-3, and [REDACTED] including documentation concerning the dates of the sales and the identities of customers receiving the particles.
6. Documents and things sufficient to show and describe the colloidal silica abrasive particles and the preparations described in the Examples and Comparative Examples disclosed in

Japanese published patent application JP2016-8157A, including any unreported testing of those particles or formulations thereof.

7. All communications and agreements with CMC concerning the timing of Your filing of any patent application, including the application that led to Japanese published patent application JP2016-8157A on June 25, 2014, as well as any communications or agreements with CMC concerning the ownership of the subject matter disclosed in any such application.

Attachment B

Topics for the Deposition of Fuso Chemical Co., Ltd.

INSTRUCTIONS

1. You shall make sure your designees are prepared to testify fully on the following topics, after conducting a diligent and thorough investigation into all information within your possession, custody, and control, including by educating the designees with such information.

2. Your designees shall bring to this deposition all documents reviewed, relied upon, or consulted in preparation for this deposition.

DEFINITIONS

1. “Fuso,” “You,” and “Your” means Fuso Chemical Co., Ltd., any employee, member, agent, representative, consultant, accountant, attorney, or any other person under the control of Fuso Chemical Co., Ltd., its predecessors-in-interest, parent corporations, divisions, subsidiaries, affiliates, joint ventures or any other legal entities that are wholly or partially owned or controlled by Fuso, either directly or indirectly, as well as the principals, directors, officers, owners, employees, members, agents, representatives, consultants, accountants, and attorneys of these entities.

2. The term “CMC” means CMC Materials, Inc., any employee, member, agent, representative, consultant, accountant, attorney, or any other person under the control of CMC Materials, Inc., its predecessors-in-interest, parent corporations, divisions, subsidiaries, affiliates, joint ventures or any other legal entities that are wholly or partially owned or controlled by CMC Materials, Inc., including Cabot Microelectronics Corporation, either directly or indirectly, as well as the principals, directors, officers, owners, employees, members, agents, representatives, consultants, accountants, and attorneys of these entities.

3. The term “DuPont” means, solely for purposes of these Requests, DuPont de Nemours Inc. and Rohm and Haas Electronic Materials CMP, LLC, any employee, member, agent, representative, consultant, accountant, attorney, or any other person under the control of DuPont de Nemours Inc. or Rohm and Haas Electronic Materials CMP, LLC, their predecessors-in-interest, including Dow Chemical Company and Rohm and Haas Electronic Materials CMP, Inc., as well as their parent corporations, divisions, subsidiaries, affiliates, joint ventures or any other legal entities that are wholly or partially owned or controlled by DuPont de Nemours Inc. or Rohm and Haas Electronic Materials CMP, LLC.

4. “Person” means any natural person or entity, including corporations, proprietorships, partnerships, associations, joint ventures, businesses, trusts, organizations, governmental agencies, and other entities, and any combination thereof, and all predecessors in interest, successors, affiliates, subsidiaries, and related entities.

5. “Asserted Patent” means U.S. Patent No. 9,499,721.

6. “Colloidal Silica Abrasive Particles” means, solely for the purposes of these Requests and Topics, silica particles that are prepared using any sol-gel process.

7. “BS”, “HL”, and “PL” each refer to Fuso colloidal silica abrasive particle series designations, including all specific grades therein, e.g, BS-3 and PL-3C.

8. “PL-xxC” refers to any PL-series colloidal silica abrasive particle treated with aminopropyl trialkoxysilane, e.g. PL-3C.

9. “Zeta Potential” in the context of a particle means, solely for the purposes of these Requests, the electrical potential difference between the electrical charge of the ions surrounding the particle and the electrical charge of the bulk solution containing the particle, such as used in Japanese published patent application JP2016-8157A.

10. The term “document(s)” includes all non-identical copies of a document, all drafts of final documents, all printed, recorded, or graphically portrayed matter in any form or embodiment, whether stored electronically or optically, or reproduced by any process, or written or produced by hand, or recorded in any other way, and all other data compilations from which information can be obtained and translated if necessary, that are or have been in Fuso’s actual or constructive custody or control, regardless of the medium on which they are produced, reproduced, or stored (including computer programs and files containing any requested information), and any recording or writing. For avoidance of doubt, the term “document(s)” includes any communications, whether written or electronic, other inquiries, correspondence, consultations, negotiations, agreements, understandings, letters, notes, telegrams, advertisements, computer mail, email, and all other documents evidencing any verbal or nonverbal interaction between persons and entities. Any document bearing marks, including initials, stamped initials, comments, or notations not part of the original text or photographic reproduction thereof, is a separate document.

11. The terms “each,” “any,” and “all” mean both any and all, and both each and every.

12. The terms “and” or “or” shall both be read in the conjunctive and in the disjunctive wherever they appear, and neither of these words shall be interpreted to limit the scope of a document request. The use of a verb in any tense shall be construed as the use of the verb in all other tenses, and the singular form shall be deemed to include the plural and vice-versa. All pronouns shall be construed to refer to the masculine, feminine, or neuter gender, in singular or plural, to make the request most inclusive.

13. When a document or thing “concerning” any matter is requested, the request encompasses, in whole or in part, any document or thing, as the case may be, constituting, containing, embodying, reflecting, describing, analyzing, identifying, mentioning, stating,

evidencing, discussing, referring to, relating to, dealing with, prepared in connection with, or in any way pertaining to the requested matter.

14. The term “describe,” when used in relation to an act, event, instance, occasion, transaction, conversation, or communication, shall mean: (1) to state the date and place thereof; (2) to identify the individual participants; (3) to summarize separately for each individual participant what s/he said or did; and (4) to identify each document used or prepared in connection therewith or making any reference thereto.

15. “Identify” in the case of documents or things shall mean to state, to the extent known, the (1) type of document or thing (e.g., letter, telephone call, etc.), (2) its general subject matter, (3) its date of creation, (4) the author(s), addressee(s), recipient(s), and all persons who received or saw the document or thing, and (5) the place where the document or thing may be inspected, or if a copy of the document or thing has been previously supplied to Fuso or produced to Fuso, to so state and to specifically and individually identify the previously-supplied Bates number or production number.

16. “Identify” in the case of a product shall mean to state, to the extent known, the (1) product’s name, (2) all trade names, (3) all internal names, including but not limited to names used during development, (4) all product numbers, part numbers, and SKU numbers, (5) all trademarks, and (6) all documents sufficient for interpreting such names, numbers, and marks.

17. The term “date” means the exact day, month, and year, if ascertainable, or if not, Your best approximation thereof.

TOPICS FOR TESTIMONY

1. The deponents' position(s) at Fuso, their technical background, and their familiarity with the documents produced in response to this Letter Rogatory
2. Your relationship with CMC and DuPont with respect to the design, development, manufacture, testing, importation into the U.S., packaging, storing, shipping, distributing, sampling, marketing, selling, and/or offering to sell colloidal silica abrasive particles with product designations HL-2, HL-3, PL-2L, PL-xxC, BS-1H, BS-2H, and BS-3.
3. Identification and description of each type of colloidal silica abrasive particle provided by You to CMC or DuPont before June 25, 2015.
4. Your agreements with CMC with respect to supplying colloidal silica abrasive particles with product designations HL-2, HL-3, PL-2L, PL-xxC, BS-1H, BS-2H, or BS-3 before June 25, 2015, including all communications, contracts, invoices and/or charges to or from CMC, and all payments received from or made to CMC.
5. Any discussions or agreements with CMC for product exclusivity over any type of colloidal silica abrasive particle, including all communications restricting access to such particles by any CMC competitor, including but not limited to DuPont.
6. For colloidal silica abrasive particles with the product designations HL-2, HL-3, PL-2L, PL-xxC, BS-1H, BS-2H, BS-3, and [REDACTED], prepared before June 25, 2015:
 - a. the process, method, technique, and manufacturing processes used to make such particles, including the catalysts (e.g., ammonium, ammonia, ethyloxypropylamine, tetramethyl ammonium hydroxide, and ethylenediamine) used therein;
 - b. product specifications and any measurements or estimations of chemical mechanical planarization ("CMP") properties or performance, pH, particle size,

zeta potential, internal nitrogen content, or internal phosphorous content of such particles or formulations thereof;

- c. the date(s) each such particle were first offered and first became available to a customer;
- d. the date(s) each such particle was first sold or offered to sell to a customer; and
- e. the date(s) of the first importation of each such particle into the United States.

6. Any testing of CMP slurries containing colloidal silica particles according to any test method disclosed in U.S. Patent No. 9,449,721, including testing for zeta potential.

7. The Examples and Comparative Examples disclosed in Japanese published patent application JP2016-8157A, as well as any undisclosed testing relating to this patent application.

8. All communications and agreements with CMC concerning the timing of Your filing of any patent application, including the application that led to Japanese published patent application JP2016-8157A on June 25, 2014, as well as any communications or agreements with CMC concerning the ownership of the subject matter disclosed in any such application.

Attachment C

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CMC MATERIALS, INC.,)	
)	
)	
Plaintiff,)	
)	
v.)	C.A. No. 20-738-MN
)	
DUPONT DE NEMOURS, INC., ROHM)	JURY TRIAL DEMANDED
AND HAAS ELECTRONIC MATERIALS)	
CMP LLC, ROHM AND HAAS)	
ELECTRONIC MATERIALS CMP ASIA)	
INC. (d/b/a ROHM AND HAAS)	
ELECTRONIC MATERIALS CMP ASIA)	
INC, TAIWAN BRANCH (U.S.A.)), ROHM)	
AND HAAS ELECTRONIC MATERIALS)	
ASIA-PACIFIC CO. LTD., ROHM AND)	
HAAS ELECTRONIC MATERIALS K.K.,)	
and ROHM AND HAAS ELECTRONIC)	
MATERIALS LLC,)	
)	
Defendants.)	

FIRST AMENDED COMPLAINT

Plaintiff CMC Materials, Inc.¹ (“CMC”) alleges as follows against Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP LLC, Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)), Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., Rohm and Haas Electronic Materials K.K., and Rohm and Haas Electronic Materials LLC (collectively, “Defendants”).

¹ Original plaintiff Cabot Microelectronics Corporation changed its name to CMC Materials, Inc. while this litigation was stayed. The parties are preparing a stipulation to effect this change formally. The Rule 7.1 disclosure statement for plaintiff remains accurate.

NATURE OF THE ACTION

1. This is a civil action for patent infringement under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*, of CMC's U.S. Patent No. 9,499,721 (the "'721 Patent"), and for such other relief as the Court deems just and proper.

2. CMC is one of the largest suppliers of consumable materials to the semiconductor industry. Among its many innovations, CMC has for decades been a pioneer in providing chemical mechanical planarization ("CMP") slurry products to nearly all semiconductor device manufacturers in the United States and throughout the world.

3. CMP slurries play a critical role in the increasingly complex production of advanced semiconductor devices. CMP slurries, in conjunction with CMP pads, are used to remove excess material that is deposited during the numerous steps in semiconductor device manufacturing and to level and smooth the surfaces of various layers of the semiconductor devices via a combination of chemical reactions and mechanical abrasion, leaving minimal residue and defects on the device surface. CMP enables semiconductor manufacturers to produce smaller, faster, and more complex semiconductor devices with a greater density of transistors. Innovation in CMP slurries is constantly needed to meet the ever-growing demand for such leading-edge devices with lower defectivity, higher production throughput, and lower cost.

4. CMC spends millions of dollars in research and development ("R&D") annually and has invested considerable capital, labor, expertise, and ingenuity in delivering innovative CMP slurry solutions to the semiconductor industry. Before the '721 Patent, CMP slurries for dielectric applications were dominated by traditional products that require a high concentration of abrasive silica particles in a high pH environment—a design that achieves high removal rates of dielectric materials, but has a high cost and a high defect level.

5. As part of CMC's extensive R&D efforts, by 2014, the inventors of the '721 Patent developed low pH CMP slurry products for dielectric applications based on engineered colloidal silica abrasive particles. Even at a low solid content, these CMP slurries can improve planarity, reduce defects, speed up polishing rates, and lower the cost of ownership—all significant benefits to CMC's customers in addressing the increasingly precise and numerous polishing steps needed in advanced semiconductor device manufacturing. These novel slurries, released by CMC as part of its D922x family of slurries, were praised by CMC's customers and have since enjoyed commercial success across the semiconductor industry.

6. The '721 Patent, entitled "Colloidal Silica Chemical-Mechanical Polishing Composition," was duly and legally issued by the United States Patent and Trademark Office on November 22, 2016, to named inventors Steven Grumbine, Jeffrey Dysard, Ernest Shen, and Mary Cavanaugh. *See* Exhibit A. The application leading to the '721 Patent was filed on June 25, 2015, and claims priority to a provisional application filed on June 25, 2014. *See id.* A true, correct, and certified copy of the '721 Patent is attached hereto as Exhibit A.

7. Each and every Defendant has, for years, infringed, directly and/or indirectly, CMC's '721 Patent by making, using, selling, and/or offering for sale within the United States and/or importing into the United States products that are covered by one or more of the claims of the '721 Patent (at least composition claims 1, 3, 4, 6, 10, 11, 13, 14, 17, 18, 19, 20, 24, 26, 27, 28, 29, 31, 35, 36, 37 and method claims 39, 40, 41, 42, 43, 44, and 46, collectively, the "Asserted Claims"), including at least the Optiplane 2300 and 2600 family of products and other products with similar components and characteristics (collectively, the "Accused Products").

8. Indeed, the International Trade Commission ("ITC"), in *Certain Chemical Mechanical Planarization Slurries and Components Thereof*, Inv. No. 337-TA-1204 ("1204

Investigation”) has already found knowing infringement of the ’721 Patent by all Defendants based on their importation and sale of the Accused Products.

9. In the 1204 Investigation, after extensive fact and expert discovery and a full evidentiary hearing with all Defendants represented by counsel, an Administrative Law Judge (“ALJ”) found that each of the Defendants named in this matter directly and/or indirectly infringe one or more of the Asserted Claims of the ’721 Patent. Exhibit B (July 8, 2021 Initial Determination, Public Version) at 87-144. The ALJ also rejected all of Defendants’ invalidity and unenforceability arguments with respect to the ’721 Patent. *See id.* at 169-297; *id.* at 169 (summarizing Defendants’ six invalidity and unenforceability arguments).

10. Each of Defendants’ infringement, inducement, and/or contribution to infringement was and continues to be willful, with full pre-suit knowledge of the ’721 Patent, with full pre-suit knowledge of infringement, and with blatant disregard for CMC’s intellectual property rights as embedded in the ’721 Patent.

11. Indeed, the ALJ found that “each of the respondents” (and therefore each of the Defendants here) “knew of the ’721 Patent” and “knew” that the composition of Defendants’ CMP slurries was “patented” by CMC well before CMC filed suit in June 2020. *Id.* at 142-43. Specifically, “the timeline of events shows that [Defendants] were well-aware of the ’721 patent during their development of the Accused Products,” and the evidence in fact shows “that any development that [Defendants] had prior to the ’721 patent did not work and was abandoned.” *Id.* at 134, 211.

12. Defendants’ knowledge and egregious willful infringement is further confirmed by the fact that, “one month after learning of CMC’s patent,” a 2017 patent application filed by Rohm and Haas Electronic Materials CMP Holdings, Inc., another affiliate of each of the Defendants,

included nearly identical language to the '721 Patent, as shown below. *See id.* at 210-11 (citing U.S. 10,557,060).

CMC's '721 Patent at 11:4-13 (Published December 31, 2015)	DuPont's '060 Patent at 7:28-38 (Filed March 1, 2016)
<p>By permanent positive charge it is meant that the positive of the colloidal silica particles in the original polishing charge on the silica particles is not readily reversible, for example, via flushing, dilution, filtration, and the like. A permanent positive charge may be the result of incorporating the positive charged species in the particle. A permanent positive charge may further result from a covalent interaction between the particle and a positively charged species and is in contrast to a reversible positive charge that may be the result, for example, of an electrostatic interaction between the particle and a positively charged species.</p>	<p>The term permanent positive surface charge as used herein is meant that the positive charge on the silica particles is not readily reversible. That is, the positive charge on the silica particles is not reversed through flushing, dilution or filtration. A permanent positive charge can be the result, for example, of covalently bonding a cationic species to the colloidal silica particles. Colloidal silica having a permanent positive charge is in contrast to colloidal silica having a readily reversible positive charge, which can be the result of an electrostatic interaction between a cationic species and the colloidal silica.</p>

13. In addition, all Defendants “have had direct knowledge of their infringement of the ‘721 patent since at least April 13, 2020, when CMC sent a claim chart detailing infringement” to Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP, LLC, and Rohm and Haas Electronic Materials LLC. *Id.* at 134.

14. On information and belief, each Defendant operates in concert with each other Defendant, and under the direction and control of Defendant DuPont de Nemours, Inc., with respect to the making, using, selling, offering for sale, and importation of the domestically manufactured Accused Products and, accordingly, each Defendant became aware of its direct and/or indirect infringement of the '721 Patent at least by April 13, 2020.

15. The full ITC reviewed the ALJ’s findings, found in favor of CMC on all issues, and issued an exclusion order and cease and desist orders against Defendants on December 16, 2021. *See Exhibit C (Comm’n Op.)*. The ITC specifically upheld the ALJ’s findings on direct and indirect infringement. *See e.g., id.* at 14 (“The Commission affirms that finding with regard to the composition claims, and finds that importation of the Optiplane™ slurry is a violation of section

337 because it constitutes the importation of an ‘article[] that – infringe[s]’ within the meaning of section 337(a)(1)(B)(i).”), 19 (“Thus, the Commission affirms the ID’s finding that Respondents contribute to Rohm and Haas Electronic Materials CMP LLC’s direct infringement of the method claims for the reasons stated in the ID.”). The ITC determined not to review, and therefore maintained, the ALJ’s findings on validity. *Id.* at 6.

16. Defendants did not appeal any of the ITC’s findings. Accordingly, the ITC’s findings became final, and this Court lifted the stay of this case on May 18, 2022. D.I. 18. CMC now seeks, and is entitled to, a monetary recovery resulting from Defendants’ infringement, including treble damages, a finding of willful infringement, and any necessary additional injunction to stop Defendants’ remaining infringement for the life of the ’721 Patent.

THE PARTIES

17. Plaintiff CMC is a publicly traded Delaware corporation with its principal place of business at 870 North Commons Drive, Aurora, IL 60504.

18. Defendant DuPont de Nemours, Inc. is a Delaware corporation with its principal place of business at 974 Centre Road, Building 730, Wilmington, DE 19805. Defendant DuPont de Nemours, Inc. is the ultimate parent of the remaining Defendants and sells and offers to sell the Accused Products and controls the making, use, and importation of the Accused Products by the other Defendants.

19. Defendant Rohm and Haas Electronic Materials CMP LLC, a subsidiary of DuPont de Nemours, Inc., is a Delaware corporation with its principal place of business at 451 Bellevue Road, Newark, DE 19713. Defendant Rohm and Haas Electronic Materials CMP LLC makes, uses, sells, offers to sell, and imports the Accused Products.

20. Defendant Rohm and Haas Electronic Materials CMP Asia Inc., a subsidiary of

DuPont de Nemours, Inc., which also does business as Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.), is a Delaware corporation with its principal place of business at 4F., NO.6, LN. 280, Zhongshan N. Rd., Dayuan Dist., Taoyuan City, 337017 Taiwan. Defendant Rohm and Haas Electronic Materials CMP Asia Inc. imports the Accused Products and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

21. Defendant Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., a subsidiary of DuPont de Nemours, Inc., is a Taiwan corporation with its principal place of business at 6, Kesi 2nd Rd., Chunan, Miaoli, 350401 Taiwan. Defendant Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. imports the Accused Products and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

22. Defendant Rohm and Haas Electronic Materials K.K., a subsidiary of DuPont de Nemours, Inc., is a Japanese corporation with its principal place of business at Sanno Park Tower, 2-11-1, Nagata-cho, Chiyoda-ku, Tokyo 100-0014 Japan. Defendant Rohm and Haas Electronic Materials K.K. imports the Accused Products and/or components thereof, and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

23. Defendant Rohm and Haas Electronic Materials LLC, a subsidiary of DuPont de Nemours, Inc., is a Delaware company with its principal place of business at 455 Forest Street, Marlborough, MA 01752. Defendant Rohm and Haas Electronic Materials LLC imports, sells and/or offers to sell the Accused Products and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

JURISDICTION AND VENUE

24. CMC incorporates by reference paragraphs 1-23.

25. This Court has jurisdiction over the subject matter of this action under 28 U.S.C.

§§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271.

26. This Court has personal jurisdiction over Defendant DuPont de Nemours, Inc. because DuPont de Nemours, Inc., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over DuPont de Nemours, Inc. because it is an entity organized under the laws of Delaware and has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including having its principal place of business in the state.

27. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials CMP LLC because Rohm and Haas Electronic Materials CMP LLC, directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials CMP LLC because it is an entity organized under the laws of Delaware and has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including having its principal place of business in the state.

28. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials CMP Asia Inc. because Rohm and Haas Electronic Materials CMP Asia Inc., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials CMP Asia Inc. because it is an entity organized under the laws of Delaware and has purposefully

availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

29. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. because Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. because it has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

30. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials K.K. because Rohm and Haas Electronic Materials K.K., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products and/or components thereof in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials K.K. because it has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

31. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials LLC because Rohm and Haas Electronic Materials LLC, directly or through affiliates,

has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials LLC because it is an entity organized under the laws of Delaware and has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

32. On information and belief, including based upon the information set forth below in paragraphs 34-62, the six Defendants named in this matter are operating in concert, under the direction and control of Defendant DuPont de Nemours, Inc., with respect to the making, using, selling, offering for sale, and importation of the domestically manufactured Accused Products. For example, via its direction and control, Defendant DuPont de Nemours, Inc. induces and contributes to infringement by other subsidiary Defendants, as the ALJ found and the ITC confirmed.

33. Venue properly lies in this District under 28 U.S.C. §§ 1391 and 1400(b) because Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP Inc., Rohm and Haas Electronic Materials CMP Asia Inc., and Rohm and Haas Electronic Materials LLC are Delaware companies and therefore reside in this judicial district, and Defendants Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. and Rohm and Haas Electronic Materials K.K. are foreign entities who may be sued in any judicial district, including Delaware.

COUNT I — INFRINGEMENT OF U.S. PATENT NO. 9,499,721

34. CMC incorporates by reference the allegations of paragraphs 1-33.

35. CMC is the owner and sole assignee of the '721 Patent and has full right to enforce

and license the '721 Patent.

36. The Accused Products satisfy each and every limitation of at least claim 1 of the '721 Patent:

1. A chemical mechanical polishing composition comprising:

a water based liquid carrier;

colloidal silica abrasive particles dispersed in the liquid carrier;

a chemical species incorporated in the colloidal silica abrasive particles internal to an outer surface thereof, wherein the chemical species is a nitrogen containing compound or a phosphorus containing compound;

a pH in a range from about 3.5 to about 6;

wherein the colloidal silica abrasive particles have a permanent positive charge of at least 15 mV; and

wherein the chemical species is not an aminosilane or a phosphonium silane.

37. The Accused Products directly and indirectly infringe at least this claim 1. Indeed, in the 1204 Investigation, the ALJ found overwhelming evidence of infringement. *See* Exhibit B at 87-144. And the ITC confirmed Defendants' direct and indirect infringement. *See* Exhibit C.

38. Specifically, "[t]he Accused Products are chemical mechanical polishing compositions used for chemical mechanical planarization," as shown by Defendants' own "marketing material and safety data sheets for the Accused Products." *See, e.g.*, Exhibit B at 92.

39. Moreover, as found by the ALJ, "[t]he Accused Products include a water based liquid carrier." *Id.* at 93. Defendants' own "recipes and technical documents" prove this limitation is met. *Id.*

40. The Accused Products also include "colloidal silica abrasive particles." *Id.* at 93-94. As found by the ALJ, Defendants' own "documents describe the Accused Products as including colloidal silica abrasive particles dispersed in a liquid carrier." *Id.*

41. The Accused Products comprise, and the ALJ also found that, “a chemical species, incorporated in the colloidal silica abrasive particles internal to an outer surface thereof, wherein the chemical species is a nitrogen containing compound or a phosphorous containing compound.” *Id.* at 95-96. Indeed, at the ITC, Defendants did not “dispute this limitation is met.” *Id.* at 95. Moreover, testing of the Accused Products, including testing by CMC’s expert in the 1204 Investigation confirmed that this limitation is met. *Id.*

42. The Accused Products also have a pH of between approximately 3.5-6. *Id.* at 97. The pH of the Accused Products was shown by CMC’s expert, which was “consistent with [Defendants’] technical documents.” *Id.*

43. In the Accused Products, the colloidal silica abrasive particles have a permanent positive charge of at least 15 mV. As found by the ALJ, “[i]nfringement is clear from the extensive testing [CMC’s expert] directed and oversaw at two independent commercial labs....” *Id.* at 97. “The Accused Products were measured in accordance with testing procedure in the ‘721 patent.” *Id.* at 98. The “infringing permanent positive charge values measured by” multiple instruments “were highly consistent.” *Id.* “Ultimately,” as the ALJ concluded, “the permanent positive charge values of all Accused Products fall well within the claimed range.” *Id.* at 99.

44. Finally, in the Accused Products, the ALJ found that “the chemical species ... is not an aminosilane or a phosphonium silane.” *Id.* at 106. In fact, “the particles do not contain aminosilane or phosphonium silane compounds.” *Id.*

45. For all of the above reasons, all of the Accused Products practice claim 1—as CMC effectively informed Defendants before filing suit, as the ALJ already found, and as the ITC already confirmed. *Id.* at 106.

46. In addition to composition claim 1, there is infringement of, and the ALJ likewise

found infringement of, numerous additional claims, including composition claims 3, 4, 6, 10, 11, 13, 14, 17, 18, 19, 20, 24, 26, 27, 28, 29, 31, 35, 36, 37 and method claims 39, 40, 41, 42, 43, 44, and 46. *Id.* at 107-124.

47. Each Defendant directly and/or indirectly infringes these claims, both literally or under the doctrine of equivalents, by making, using, selling and/or offering for sale within the United States and/or importing into the United States the Accused Products in violation of 35 U.S.C. § 271(a).

48. For example, Defendant “Rohm and Haas Electronic Materials CMP LLC makes, uses, sells, and tests the Accused Products” in the United States and directly infringes all of the composition and method claims of the ’721 Patent. Exhibit B at 140; *see also* Exhibit C at 19 (“Rohm and Haas Electronic Materials ... make[s] the infringing slurries in the United States and thereby directly infringes the asserted composition claims.”). Specifically, “Rohm and Haas Electronic Materials CMP LLC combines the ... particle with other components of the Accused Products” to make the Accused Products in the United States. Exhibit B at 140. “Rohm and Haas Electronic Materials CMP LLC then tests the completed slurries using the process claimed in the method claims, and thereby directly infringe[s] the asserted method claims.” Exhibit C at 19; *see also* Exhibit E (DuPont Public Interest Statement) at 2 (“Since 2000, DuPont has owned and operated a state-of-the-art production facility in Newark, Delaware where Optiplane™ CMP slurries are manufactured ... Thus, DuPont’s Optiplane™ CMP slurries are a domestically manufactured product.”).

49. In addition, Defendant DuPont de Nemours, Inc. offers for sale and sells the Accused Products in the United States. For example, DuPont admitted that “after using the imported particles to make and use the Accused Products, respondents sell samples of the Accused

Products to customers and others in the United States.” Exhibit B at 129. The Accused Products are advertised and offered for sale in the United States on Defendant DuPont de Nemours, Inc.’s website. *See* Exhibit D (DuPont Website); *see also* Exhibit E (DuPont Public Interest Statement) at 3 (“Multiple semiconductor companies ... use DuPont’s Optiplane™ CMP slurries.”); Exhibit F (DuPont Public Interest Submission) at 1 (“DuPont is a global leader in the CMP slurry market and supplies its domestically made slurries to major companies in the semiconductor chip manufacturing industry in the United States and overseas.”).

50. Finally, Defendants Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)), Rohm and Haas Electronic Materials CMP Asia Inc., (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)), Rohm and Haas Electronic Materials Asia-Pacific Co. Ltd., and Rohm and Haas Electronic Materials K.K. import the Accused Products and/or components thereof into the United States, and Rohm and Haas Electronic Materials LLC imports, sells, and/or offers to sell the Accused Products in the United States.

51. In addition to directly infringing the ’721 Patent, Defendants have indirectly infringed and continue to indirectly infringe one or more claims of the ’721 Patent.

52. As set forth in paragraphs 1-51, each of the Defendants has known about the ’721 Patent and its respective infringement well before the original Complaint was filed in this matter. Moreover, Defendants were adjudicated to infringe each and every Asserted Claim nearly one year ago and have still continued to knowingly and willfully infringe.

53. In addition, in violation of 35 U.S.C. § 271(b), each of the Defendants has actively induced and continues to actively induce others (including other Defendants, customers of the Accused Products, and other third parties) to directly infringe the ’721 Patent, by engaging in and

actively acting in concert with each other relating to: (a) the supply of the Accused Products and/or components of the Accused Products with the intention they will be used in the United States in an infringing manner by other Defendants, customers, and/or other third parties; (b) the marketing, distribution, and/or sale of the domestically-manufactured Accused Products to domestic and foreign customers (including on Defendants' websites); and/or (c) the instruction and encouragement of customers to use the Accused Products in an infringing manner with knowledge that these actions would infringe the '721 Patent. *See* Exhibit B at 139 ("In light of the above, respondents knowingly induced infringement of the '721 patent with specific intent to do so, including by providing components in the United States to assemble and/or making infringing products, selling these products to United States customers for use in the United States and otherwise intentionally causing direct infringement.").

54. For example, as the ITC found, "Defendants DuPont de Nemours, Inc. and Rohm and Haas Electronic Materials K.K., actively induce other respondent subsidiaries, including at least Rohm and Haas Electronic Materials CMP in Delaware to infringe the '721 Patent." Exhibit C at 17. "Specifically, employees of DuPont de Nemours, Inc. and subsidiary Rohm and Haas Electronic Materials K.K. of Japan purchase BS-3 colloidal silica particles in Japan and cause them to be imported into the United States with the intention that they will be used in the United States by Rohm and Haas Electronic Materials CMP LLC to make infringing CMP slurries, which are then used in an infringing manner in the United States by Rohm and Haas Electronic Materials CMP LLC, its customers, and a third-party lab." *Id.*

55. Similarly, at least Defendants Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)) and Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. actively induce other Defendants, including

at least Rohm and Haas Electronic Materials CMP LLC, to infringe the '721 Patent. Defendants Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)) and Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. are engaged in the marketing, selling, and/or offering for sale of the Accused Products to customers and such activities cause Rohm and Haas Electronic Materials CMP LLC to make, use, and test the Accused Products in the United States, and thereby directly infringe the '721 Patent, to facilitate such sales and marketing activities.

56. Furthermore, as the ALJ found, “there is direct infringement by respondents’ customers and respondents induce this infringement by supplying them with the Accused Products” and instructing their use in a manner that infringes the claims. Exhibit B at 138. For example, at least Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP LLC, and Rohm and Haas LLC induce United States customers to infringe the '721 Patent by supplying the Accused Products and instructing their use in a manner that infringes both the asserted composition and method claims of the '721 Patent. In this regard, the evidence shows that Defendants “are familiar with how their customers use the Accused Products,” and such use directly infringes the '721 Patent. Exhibit B at 138.

57. In violation of 35 U.S.C. § 271(c), each of the Defendants has also contributed to and is continuing to contribute to infringement of the '721 Patent by others (such as other Defendants and customers) by selling and/or offering for sell within the United States and/or importing into the United States the Accused Products and/or components of the Accused Products, that are especially made and/or adapted for infringing the '721 Patent and are not staple articles of commerce suitable for substantial non-infringing use.

58. For example, Defendants, “including DuPont de Nemours, Inc. and subsidiaries

Rohm and Haas Electronic Materials CMP LLC and Rohm and Haas Electronic Materials K.K. of Japan, cause to be imported into the United States ... the ... particle component of the Accused Products.” Exhibit B at 140. The importation and “supply of the particles by the foreign respondents,” Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.) and Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., and Rohm and Haas Electronic Materials K.K., “contributes to direct infringement by Rohm and Haas Electronic Materials CMP LLC.” Exhibit C at 18-19. “Rohm and Haas Electronic Materials CMP LLC uses the [imported and] supplied particle to make the infringing slurries in the United States and thereby directly infringes the asserted composition claims.” *Id.* at 19. In addition, with respect to the method claims of the ’721 Patent, “Rohm and Haas Electronic Materials CMP LLC then tests the completed slurries using the process claimed in the method claims, and thereby directly infringe the asserted method claims.” *Id.* at 19.

59. The supplied particle is a “component that [Defendants] control for purposes of making the Accused Products” and thus has no substantial non-infringing uses and is not a staple article of commerce. Exhibit B at 136; *see also id.* at 141 (“[N]either the Accused Products nor the imported ... particles have any substantial non-infringing use Respondents import ... colloidal silica particles that are specifically designed and tailored for respondents to use in respondents’ Accused Products [The imported colloidal silica particle] is not an off-the-shelf commodity product.”); *id.* at 142 (“Indeed, respondents have identified no other use for the ... particles than to be made into the Accused Products, and the Accused Products in turn have no use other than to be used for CMP as described in the ’721 Patent For at least these reasons the ... particles are especially made for infringement of the ’721 patent and are not a staple article.”).

60. In addition, as the ALJ found, “all respondents,” and thus all Defendants in this

matter, “contribute to the infringement of respondents’ United States customers” and other third parties that use and test the Accused Products in the United States. Exhibit B at 142.

61. Defendants’ infringement of the ’721 Patent is deliberate and willful, justifying enhanced damages under 35 U.S.C. § 284 and attorneys’ fees and costs incurred in prosecuting this action under 35 U.S.C. § 285. As the ALJ found, “[i]t appears respondents followed CMC’s invention” and were “well-aware of the ’721 Patent during” Defendants’ “development of the Accused Products.” Exhibit B at 134. As described above, each of the Defendants knew of the ’721 Patent and knew that the composition of the Accused Products was patented well before CMC filed suit in June 2020. Nonetheless, despite being on notice of infringement of the ’721 Patent, and even after fully litigating the case and receiving a ruling by the ITC in favor of CMC on all issues, each of the Defendants has continued its infringing activity knowing and intending to directly and/or indirectly infringe the ’721 Patent.

62. Defendants’ infringement has caused and is continuing to cause damage and irreparable injury to CMC, and CMC will continue to suffer damage and irreparable injury unless and until that infringement is enjoined by this Court. By this action, CMC seeks to stop Defendants’ willful, unauthorized, and improper use of the ’721 Patent, and to obtain monetary relief, including significant damages for the significant harm caused to CMC by Defendants’ willful infringement.

PRAYER FOR RELIEF

WHEREFORE, CMC prays for relief as follows:

a. That each Defendant has infringed and continues to infringe the ’721 Patent, either directly and/or indirectly;

b. That each Defendant's infringement of the '721 Patent has been and continues to be willful;

c. In accordance with 35 U.S.C. § 284, that each Defendant be ordered to pay to CMC all monetary damages to which CMC is entitled (together with pre and post judgment interest), including increased damages for willful infringement;

d. That this case be declared exceptional in accordance with 35 U.S.C. § 285 and that CMC be awarded and Defendants pay CMC's attorneys' fees;

e. An injunction prohibiting further infringement of the '721 Patent; and

f. Such other and further relief as this Court may deem just and equitable.

DEMAND FOR JURY TRIAL

A jury trial is demanded on all claims and issues so triable.

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/s/ John W. Shaw

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